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Hans Groeblacher

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EXAMINER

LEYSON, JOSEPH S

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/803,161	Applicant(s) GROEBLACHER ET AL.	
	Examiner Joseph Leyson	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6-8 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-8,11 and 12 is/are rejected.
- 7) ☒ Claim(s) 1,2,6 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claim 13 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse, as mentioned in the Office Action mailed on March 29, 2007.

Claim Objections

2. Claims 1, 2, 6 and 7 are objected to because of the following informalities: in claim 1, line 4, "of. peaks" appears to be a typographical error and should be --of, peaks--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 2, 6-8, 11 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites "at least four of. peaks and at least a valley, on each side of the axis". And, claim 8 recites "at least four of, peaks and valleys, on each side of the axis". However, such subject matter is new matter because it is not originally disclosed. The

original specification (i.e., p. 2, lines 12-14) discloses that the complex shape can have at least four peaks and two valleys, and that the peaks and valleys can be symmetrically divided on opposite sides of a central axis. In other words, there can be at least two peaks and one valley on each side of the axis. Note that the minimum combinations of peaks and valleys recited by claims 1 and 8, as mentioned above, are NOT found in the original specification. For example, one peak and three valleys on each side of the axis is covered by the minimum combinations of claims 1 and 8, which clearly is NOT originally disclosed and is thus NEW MATTER.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 2, 6-8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dukert et al. (U.S. Patent 3,570,062) in view of Huang et al. (U.S. 5,756,016).

Dukert et al. (U.S. Patent 3,570,062) disclose an extrusion die for making a hollow profile (i.e., figs. 1-6) including an inner die portion 74, 76 having a male form having a male shape and an axis, an outer die portion 88 having a female form having a female shape, the female shape surrounding and being separated from the male shape by a gap (i.e., fig. 1), flowable material capable of being extruded through the gap between the male and female shapes to form the hollow profile; and an adjustment mechanism including an outer member (i.e., retaining ring 90) surrounding the outer die portion 88, and a plurality of adjustment screws 96 threaded through the outer member 90 and engaging a flange 94 extending from the outer die portion 88 at angular locations and configured to provide controlled incremental linear and rotational adjustment of the female shape relative to the male shape for adjusting the gap and for adjusting the position and orientation of the male and female shapes relative to each other. The male shape of the inner die portion 74, 76 is surrounded by the female shape of the outer die portion 88 on all sides (i.e., the gap produces an annular product; col. 4, lines 70-74). The inner die portion 74, 76 is fixed within a spider pipe 10, 48. The outer member 90 secures the outer die portion 88 to the spider pipe 10, 48, the adjustment screws 96 being threaded radially inwardly through the outer member 90 to engage the outer die portion 88. However, Dukert et al. (U.S. Patent 3,570,062) does not disclose the male and female form having a complex shape; the male complex

shape having at least four of, peaks and at least a valley, on each side of the axis, as recited by instant claim 1; the male complex shape having at least four of, peaks and valleys, on each side of the axis, as recited by instant claim 8; or the adjustment screws being at equidistant angular locations or being at least eight in number.

Huang et al. (U.S. 5,756,016) discloses a extrusion die (i.e., figs. 6 and 7) for extruding a complex shape product, the die including an inner die portion 112 having a male form, the male form having a male complex shape with peaks and valleys, an outer die portion 114 having a female form, the female form having a female complex shape with peaks and valleys which correspond to the male complex shape of the male form, the female complex shape surrounding and being separated from the male complex shape by a gap 122. As shown in fig. 6, the complex shapes are shown. If you make a vertical symmetrical axis in fig. 6, the complex shapes shown include four peaks and one valley. Note that the complex shapes shown in fig. 6 are similar to those of fig. 6 of applicant's specification.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the extrusion die of Dukert et al. (U.S. Patent 3,570,062) such that the male and female form have complex shapes with peaks and valleys which correspond to each other, as recited by the instant claims, because it is notoriously well known and conventional in the art to vary the shape of the die gap to obtain desired product shapes and/or because such complex shapes are well known and conventional in the art, as disclosed by Huang et al. (U.S. 5,756,016), and would enable the die of Dukert et al. (U.S. Patent 3,570,062) to provide a product having a complex shape; and

to modify the adjustment screws of Dukert et al. (U.S. Patent 3,570,062) to be at equidistant angular locations and to be at least eight in number because such adjustment screw modifications would have been found due to routine engineering or experimentation in finding the operable or optimum position and number of screws which enable centering of the outer die portion relative to the inner die portion to obtain uniform profile thickness in view of the teachings of Dukert et al. (U.S. Patent 3,570,062: col. 4, lines 70-74) who disclose a plurality of circumferentially spaced adjustment screws (i.e., two or more adjustment screws at various angular positions) to enable such centering to obtain uniform profile thickness.

8. Claims 1, 2, 6-8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dukert et al. (U.S. Patent 3,570,062) in view of Huang et al. (U.S. 5,756,016) and Stewart (U.S. Patent 3,461,501).

If applicants do not agree that the number and position of the adjustment screws are obvious in view of the teachings of Dukert et al. (U.S. Patent 3,570,062), this rejection is further put forward.

Dukert et al. (U.S. Patent 3,570,062) and Huang et al. (U.S. 5,756,016) are applied as above.

Stewart (U.S. Patent 3,461,501) discloses an extrusion die for making a hollow profile including an inner die portion 1 or 1' having a male form having a male shape, an outer die portion 2 or 2' having a female form having a female shape, the female shape surrounding and being separated from the male shape by a gap 7 or 7', flowable material capable of being extruded through the gap between the male and female

shapes to form the hollow profile, and an adjustment mechanism including an outer member (i.e., ring 3 or 3') surrounding the outer die portion 2 or 2'; and a plurality of adjustment screws 5 or 5' threaded through the outer member 3 or 3' and engaging the outer die portion 2 or 2' at equidistant angular locations (i.e., figs. 1 or 2) and configured to provide controlled incremental linear and rotational adjustment of the female shape relative to the male shape for adjusting the gap 7 or 7' and for adjusting the position and orientation of the male and female shapes relative to each other, the number of adjustment screws 5 or 5' being 8 (fig. 1) or more (fig. 2).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the extrusion die of Dukert et al. (U.S. Patent 3,570,062) such that the male and female form have complex shapes with peaks and valleys which correspond to each other, as recited by the instant claims, because it is notoriously well known and conventional in the art to vary the shape of the die gap to obtain desired product shapes and/or because such complex shapes are well known and conventional in the art, as disclosed by Huang et al. (U.S. 5,756,016), and would enable the die of Dukert et al. (U.S. Patent 3,570,062) to provide a product having a complex shape; and to modify the adjustment screws of Dukert et al. (U.S. Patent 3,570,062) to be at equidistant angular locations and to be at least eight in number because such adjustment screw modifications are well known and conventional in the art, as disclosed by Stewart (U.S. Patent 3,461,501) and would provide an alternative adjustment screw configuration known to be operable in the art for positioning the outer die portion relative to the inner die portion.

9. Claims 1, 2, 6-8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dukert et al. (U.S. Patent 3,570,062) in view of the Declaration of James W. Nixon.

Dukert et al. (U.S. Patent 3,570,062) is applied as above.

In the Declaration of James W. Nixon filed on September 10, 2007, he admits that for many years in the prior art adjustable simple shape dies can have 4, 6 or 8 adjusting screws, that American Maplan has been making such dies for about 30 years, and that for many years in the prior art a fixed complex profile die having multiple peaks and valleys was known in the art.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the extrusion die of Dukert et al. (U.S. Patent 3,570,062) such that the male and female form have complex shapes with peaks and valleys which correspond to each other, as recited by the instant claims, because it is notoriously well known and conventional in the art to vary the shape of the die gap to obtain desired product shapes and/or because such complex shapes are well known and conventional in the art, as admitted in the Declaration, and would enable the die of Dukert et al. (U.S. Patent 3,570,062) to provide a product having a complex shape; and to modify the adjustment screws of Dukert et al. (U.S. Patent 3,570,062) to be an eight screw configuration as recited by the instant claims because such adjustment screw modifications are well known and conventional in the art, as admitted in the Declaration) and would provide an alternative adjustment screw configuration known to be operable in the art for positioning the outer die portion relative to the inner die portion.

Response to Arguments

10. Applicant's arguments with respect to the instant claims have been considered but are moot in view of the new ground(s) of rejection.

Applicants argue that complex die shapes were considered too intricate and complex to be adjustable, and that complex die shapes were made non adjustable in the prior art. However, such statements are self-serving statements and/or opinions, which are conclusory statements without factual basis.

The main issue in this case appears to be whether it is obvious to modify a fixed complex shape die with the adjustment mechanism of Dukert et al. (U.S. Patent 3,570,062). The adjustment mechanism of Dukert et al. is applicable to move a female die 88 relative to a male die 74, 76. In a complex shape die with peaks and valleys, it should be noted that such a die ALSO includes a female die and a male die. Thus, it would be obvious to an artisan of ordinary skill that the teachings of adjusting the female die relative to the male die of Dukert et al. would be applicable to complex shape dies that include female and male dies.

Applicants argue that as seen in FIG. 6 of Huang, although the male 112 and female 114 dies have complex shapes, the female die 114 has gaps indicated by reference numbers 156 and 164 which are only formed in the female die 114 and do not have a corresponding of matching portion on the male die 112. The gaps 164 of the female die 114 join gaps 162 in a tee shaped configuration. The structure on the male die 112 opposite to the tee shaped configuration is a corner, and therefore, the peaks and valleys of the female complex shape do not match the male complex shape, as

claimed. The examiner respectfully disagrees. The instant claims do NOT negate gaps 156 and 164. The instant claims only require that the peaks and valleys of the female complex shape match the male complex shape. Note that the tee shaped configuration, as mentioned by applicants, includes a corner which matches the corner of the male complex shape.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

11. The Declaration under 37 CFR 1.132 filed on September 10, 2007 is insufficient to overcome the rejection of the instant claims as set forth in this Office action. In the Declaration, James W. Nixon states that complex profile extrusion dies were made non adjustable in the prior art, that no one in the extrusion field attempted to make adjustable complex extrusion dies, that it was not apparent to him or suggested to make an adjustable complex extrusion die, that his prior experience in the extrusion field taught against making an adjustable complex extrusion die, and that prior art fixed or nonadjustable dies typically consist of components that are assembled and pinned together in a configuration that is not suitable to modify for adjustment. However, such statements are self-serving statements and/or opinions, which are conclusory statements without factual basis. It should be noted that the Declaration is NOT commensurate in scope with the instant claims. The statements of the Declaration

relate to the complex shapes having multiple peaks and valleys, but none of the statements mention "at least four of. peaks and at least a valley, on each side of the axis", as recited by instant claim 1; or "at least four of, peaks and valleys, on each side of the axis", as recited by instant claim 8. The Declaration states that the benefit of the claimed invention is that the time it would take to adjust a fixed complex die is longer than that of an adjustable complex die. However, such a benefit would be the same between a fixed simple shape die and an adjustable simple shape die. Furthermore, it would be obvious to a skilled artisan that a fixed die would take longer to adjust than an adjustable die because the adjustable die is ADJUSTABLE.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Leyson whose telephone number is (571) 272-5061. The examiner can normally be reached on M-F 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gupta Yogendra can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert B. Davis/
Primary Examiner
Art Unit 1791
November 26, 2007


JL